July 2007 Printing (Updated March 17, 2008)

Chapter 3.

Corrected edition to International Building Code reference

R301.2.2 Seismic provisions. The seismic provisions of this code shall apply to buildings constructed in Seismic Design Categories C, D_0 , D_1 , and D_2 , as determined in accordance with this section. Buildings in Seismic Design Category E shall be designed in accordance with the *2006 International Building Code*, except when the Seismic Design Category is reclassified to a lower Seismic Design Category in accordance with Section R301.2.2.1.

Corrected error listing of footnotes.

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND SPEED ^d (mph)	SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			ICE BARRIER		AIR	MEAN
			WEATHERING ^a	FROST Line depth ^b	Termite ^c	UNDERLAYMENT REQUIRED ^h	FLOOD HAZARDS ⁹	FREEZING INDEX	ANNUAL TEMP ^j

For SI: 1 pound per square foot = 0.047kPa. 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible", "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C34, C55, C62, C73, C90, C129, C145, C216 or C652.
- b. The frost line depth shall be determined by Table R403.1.4. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the gable to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. Deleted
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Table R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the national Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the currently effective FIRM and FBFM, or other flood hazard map adopted by the community, as may be amended.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES". Otherwise, the jurisdiction shall fill in this part of the table with "NO".
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or fro the 100-year)99%) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the national Climatic Data Center data table "Air Freezing Index-USA Method (Base 32° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.
- k. The jurisdiction shall fill in this part of the table with data for the specific county from Table R301.2.2.1.

Corrected Table R301.2.2.1 to reflect design loads for all 120 counties.

TABLE R301.2.2.1 DESIGN SNOW AND SEISMIC LOADS FOR KENTUCKY COUNTIES

	1		ı	T	T
County	Ground Snow Load pg (psf) ^a	Seismic Design Category ^b	County	Ground Snow Load pg (psf) ^a	Seismic Design Category ^b
Adair	15	В	Knox	15	С
Allen	15	В	Larue	15	B
Anderson	15	В	Laurel	15	B
Ballard	15	D_2	Lawrence	15	В
Barren	15	В	Lee	15	В
Bath	15	В	Leslie	20	С
Bell	15°	С	Letcher	20 ^d	С
Boone	20	В	Lewis	20	В
Bourbon	15	В	Lincoln	15	В
Boyd	20	В	Livingston	15	D ₁
Boyle	15	B B	Logan	15 15	C D₀
Bracken Breathitt	20 15	В	Lyon McCracken	15	D_0
Breckinridge	15	C	McCracken McCreary	15	D ₂ C
Bullitt	15	В	McLean	15	C
Butler	15	С	Madison	15	В
Caldwell	15	D ₀	Magoffin	15	В
Calloway	15	D_0	Marion	15	B
Campbell	20	B	Marshall	15	D ₁
Carlisle	15	\overline{D}_2	Martin	20	B
Carroll	20	B	Mason	20	В
Carter	15	В	Meade	15	В
Casey	15	В	Menifee	15	В
Christian	15	С	Mercer	15	В
Clark	15	В	Metcalfe	15	В
Clay	15	C	Monroe	15	В
Clinton	15	В	Montgomery	15	В
Crittenden	15	D_0	Morgan	15	В
Cumberland Daviess	15 15	B C	Muhlenberg Nelson	15 15	C B
Edmonson	15	C	Nicholas	15	В
Elliott	15	В	Ohio	15	C
Estill	15	В	Oldham	15	B
Fayette	15	В	Owen	20	В
Fleming	15	В	Owsley	15	В
Floyd	20	В	Pendleton	20	В
Franklin	15	В	Perry	20	С
Fulton	15	D_2	Pike	20°	В
Gallatin	20	В	Powell	15	В
Garrard	15	В	Pulaski	15	В
Grant	20	В	Robertson	15 15	В
Graves	15 15	D ₂ C	Rockcastle	15 15	<u>В</u> В
Grayson Green	15	В	Rowan Russell	15	B B
Greenup	20	В	Scott	15	В
Hancock	15	C	Shelby	15	В
Hardin	15	В	Simpson	15	C
Harlan	15°	C	Spencer	15	B
Harrison	15	В	Taylor	15	В
Hart	15	В	Todd	15	С
Henderson	15	С	Trigg	15	D_0
Henry	20	С	Trimble	20	В
Hickman	15	D_2	Union	15	D_0
Hopkins	15	C	Warren	15	C
Jackson	15	В	Washington	15	В
Jefferson	15	В	Wayne	15	В
Jessamine	15	В	Webster	15	C
Johnson Kenton	15 20	B B	Whitley Wolfe	15 15	B B
Kenton Knott	20	В	Woodford	15	В
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Corrected spelling errors located in first printing.

R301.2.2.2.2 Irregular buildings. Prescriptive construction as regulated by this code shall not be used for irregular structures located in Seismic design Categories C, D_0 , D_1 and D_2 . Irregular portions of structures shall be designed in accordance with accepted engineering practice to the extent the irregular features affect the performance of the remaining structural system. When the forces associated with the irregularity are resisted by a structural system designed in accordance with accepted engineering practice, design of the remainder of the building shall be permitted using the provisions of this code. A building or portion of a building shall be considered to be irregular when one or more of the following conditions occur:

2. When a section of floor or roof is not laterally supported by shear walls or braced wall lines on all edges.

Exceptions:

- 1. Portions of floors that do not support shear walls or braced wall panels above, or roofs, shall be permitted to extend no more than 6 feet (1829 mm) beyond a shear wall or braced wall line.
- 2. Portions of floors that do not support shear walls or braced wall panels above, or roofs, shall be permitted to extend no more than 25 feet (7,620 mm) or two-thirds of the width of the cantilever portion, whichever is less, beyond a shear wall or braced wall line provided that:
 - a. If a roof deck, the overhang is continuously braced by a wood truss designed for the lateral load effects of the overhang, or shear walls or braced wall panels between the roof deck and ceiling. The bracing element shall be directly over the line of the lower braced wall system.
 - b. All unsupported deck edges are continuously blocked and all edges are nailed with 8d common nails or not greater than 6" (152 mm) centers.
- 3. Where only one side of the section is unbraced, the length perpendicular to the unbraced side shall not exceed 25 feet nor have a ratio to the unbraced dimension of 1 for a one-story structure or 0.67 for other structures, whichever is less, provided:
 - a. All unsupported deck edges within the section are continuously blocked and all edges are nailed with 8d common nails or not greater than 6" (152 mm) on center.
- 4. When an opening in a floor or roof exceeds the lesser of 12 feet (3657 mm) or 50 percent of the least floor of roof dimension